

## #10 - SITE GRADING AND DRAINAGE PROBLEMS





High grading around the foundation is one of the most common issues identified on inspection reports. The proper minimum clearance between the facade and the soil is 4 to 6 inches. High grades are most commonly found in planter areas. Homeowners often place new mulch without removing the old, creating potential issues.

Ponding water around a foundation can cause a loss of support and settlement. When water sits against the foundation without proper drainage, the ponding can result in wood rot and mold throughout the structure.

Siding, stucco and stone/brick veneers are not waterproof, so water easily penetrates the exterior walls. High grading can obstruct the weep holes that allow the moisture to escape. If the drainage is blocked, the moisture gets trapped in the wall, promoting more wood rot and mold.

### Solution

Drainage problems are avoidable with proper grading. Site grading should always slope away from the foundation for at least 5 feet. Gutter downspouts should always direct the water at least 5 feet away from the foundation or deposit into a site drainage system.

### #9 - GALVANIZED PIPES

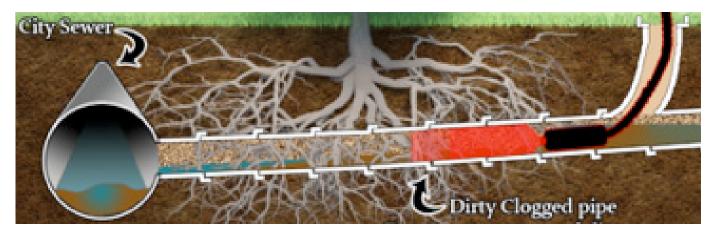


"Galvanized" pipes are zinc-coated pipes that were meant to prevent rusting. Galvanized piping was common until the 1950s and lasts around 40 to 60 years.

### Solution

When galvanized pipes are found today, they are usually near the end of their lives and in need of replacement.

## #8 - MAIN DRAIN AND SEWER ISSUES



Clogged or obstructed pipes are extremely common. Many times, underground pipes are damaged by tree roots, which are drawn to pipes for their moisture. Signs of main drain and sewer issues are floor staining or sitting water of unknown origin. Homebuyers often look for rooter or plumbing stickers, which indicate the pipes have been well-maintained.

### Solution

Sewer line scans can identify any plumbing issues, giving insight to any potential repairs.

### **#7 - FAULTY ELECTRICAL**

Electrical issues are often undetectable without a full-fledged inspection. However, there are some defective systems that an informed homebuyer may be on the lookout for.

### **Knob and Tube Wiring**

You may come across knob and tube wiring in homes built between 1880-1940. This type of system is designed so that heat from the wires can dissipate through an open space. However, this wiring is often prone to overheating when in contact with insulation or if the wires are too close together. The high risk of fire leads insurance companies to charge higher premiums or even deem a home un-insurable.



### **Aluminum Branch Circuit Wiring**

Aluminum branch circuit is a permitted method of wiring with the appropriate installation methods and materials. However, careful workmanship is required because of aluminum's unique electrical properties and its delicacy. Poor workmanship has led to many improper connections, which result in overheating and fire hazards. These systems face the same insurance-related problems as knob and tube systems. If improper connections were made, repairs are possible with a highly skilled technician.



### **Unreliable Brands of Electrical Panels**

Federal Pacific Electric (FPE) Stab-loc breaker panels and Zinsco panels are often cause for concern in the electrical industry. Many of these panels use failing breakers, causing the system to overheat.

#### Solution

Determine if a home's electrical system is in need of repair or upgrades with a professional home inspection.

## #6 - DRYWALL CRACKS

Drywall, like any other material, expands and contracts with temperature. This movement often causes minor cracking on its surfaces. Cracking is normal at the intersections of walls and ceilings. These minor cracks can be easily repaired without cause for concern.

Diagonal cracks from the corner of doors or windows are often a sign of foundation movement. These types of cracks require professional evaluation to assess the extent of the damage.

#### Solution

Following an inspection, your report may identify a possible cause of any drywall cracks and the extent of their damage. For minor cases, a homeowner can easily repair cracks themselves. Depending on severity, a professional should determine the cause to rule out any foundational issues.

### **#5 - FOUNDATION CRACKS**

It's important to note that like drywall cracks, not all foundation cracks are serious problems. Most concrete foundation cracks can be easily repaired, but understanding their cause is key.

Corner cracks are extremely common. Normally, they are not a cause for concern unless a piece falls off or is removed. Even then, it only requires some patching.

When reinforcing steel is exposed or rusting, a coat of rust-inhibiting paint is required, along with a concrete patch to prevent further damage.

### Solution

Here are common types of foundation cracks and their corresponding solutions.



### Hairline Cracks (1/16 inches or Less)

Hairline cracks are most likely caused by shrinkage during the curing process of poured concrete. They do not present any concern.



### Cracks 1/8 inches or Less

Cracks this size may indicate either shrinkage from curing or foundational movement. This crack should be sealed and monitored.



### Cracks 1/4 inches or More

Cracks this large are most likely due to foundational movement. A structural engineer should be consulted.



### **Basement Foundation Walls**

Horizontal cracks found in the basement can be minor or major. Some minor cracks may be repairable DIY-style. Depending on their width and severity, some cracks may require stabilization repairs such as wall tiebacks or carbon fiber reinforcement. An NPI inspector would typically suggest a consultation with a structural engineer.

## **#4 - POOR DECK CONDITIONS**



Poor deck conditions are often visible to untrained eyes. Check for post deterioration or chipped paint. Less obvious red flags exist in a deck's support system. Unstable support is often characterized by uneven or sloped boards.

Industry standards require all ledger boards be bolted to the house, and joist hangers must be installed on every joist with the appropriate type and amount of fasteners (left). All decks should have adequate fall protection including handrails and spindles.

### Solution

Most deck issues can be self-repaired by a homeowner. For any structural concerns, a homebuyer can request an engineer consultation. Deterioration can be prevented with adequate maintenance and updated sealant.

# **#3 - WORN ROOFING OR LEAKAGE**





Roof condition is often a key factor in home appraisal. Excessive granular loss (pictured above) is a key indicator of poor condition. Note that the south-facing side of a house always displays the most wear.

## Stages of a Roof



New, 0-5 years Little to no granular loss No cupping or curling Straight edges



Medium Wear, 5-15 years Mild to moderate granular loss Some cupping or curling



Heavy Wear, 15+ years Excessive granular loss Excessive cupping or curling Deformed edges

Vegetation in contact with a home is often a red flag for buyers, as it typically causes or conceals roof damage.

Water stains on a roof or ceiling often indicate a leak. However, roof leaks are often hard to spot at the time of purchase and even more difficult to pinpoint and repair. A small leak left unrepaired can cause structural damage to the foundation, drywall and finishes. Variations or deformations in a ceilings texture can indicate previous patches or leaks. In addition, a freshly painted ceiling is a red flag for homebuyers, as it's often an effort to conceal previous leaks.

#### Solution

Replacing or repairing a roof is a significant expense for a homeowner. Buyers will avoid a house entirely if the roof is in need of repairs. The condition should always be a consideration in an offer. For older, worn roofs, a homeowner can get a Roof Certification from a roofing company or a general contractor, indicating a sufficient condition.

### #2 - MOLD





Mold will grow anywhere that excessive moisture is present. It eats paper and wood materials within a home. Still, mold should be treated on a case-by-case basis to determine severity.

Small amounts of mold and mildew around showers, tubs and sinks are normal (above, left). Small amounts of mold on window sills are normal and most likely caused by condensation. These do NOT present a major problem or concern.

However, mold found on walls or ceilings outside of a kitchen or bathroom DOES signal a problem (above, right). Typically, this indicates a roof or plumbing leak. Any amount of mold to the sides or below a window or door indicates a leak as well. These are definitely a major problem.

### Solution

If you suspect a home has mold, encourage the owners to schedule a mold inspection immediately. Locating mold as soon as possible is key to saving thousands of dollars.

## **#1 - CLIENTS WHO DON'T WANT A HOME INSPECTION**

It's important to remember that all homes have issues - even new ones. It's always best to identify potential problems and address them prior to closing. Whether it's a homeowner who fears losing an offer or a homebuyer who wants to rush the acquisition process, skipping out on a home inspection should be a red flag to all parties involved. Not having an inspection increases the risk for both client and agent alike.

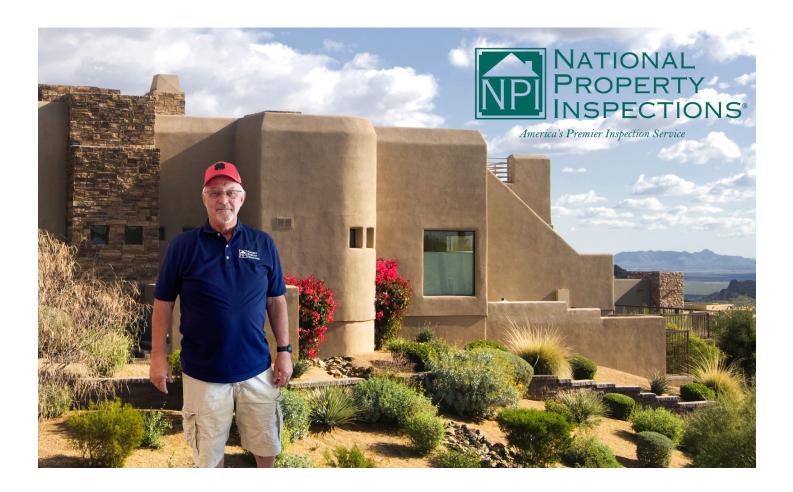
### Solution

Encourage your clients to schedule an inspection by contacting your local NPI inspector today.

Visit www.npiweb.com or call 1-800-333-9807.

# WHAT TO DO IF YOU FIND A RED FLAG

- 1. Bring the potential problem to your client's attention.
- 2. Consult a professional (property inspector, electrician, plumber, structural engineer, etc.) to determine the severity of the issue.
- 3. Determine the repair cost. NPI recommends getting at least 2 separate consultations from licensed contractors.
- 4. Keep the issue in mind during negotiations.



Contact your local NPI inspector today. Your clients will thank you.